

Civil Report Card On GPS Performance

October 2010

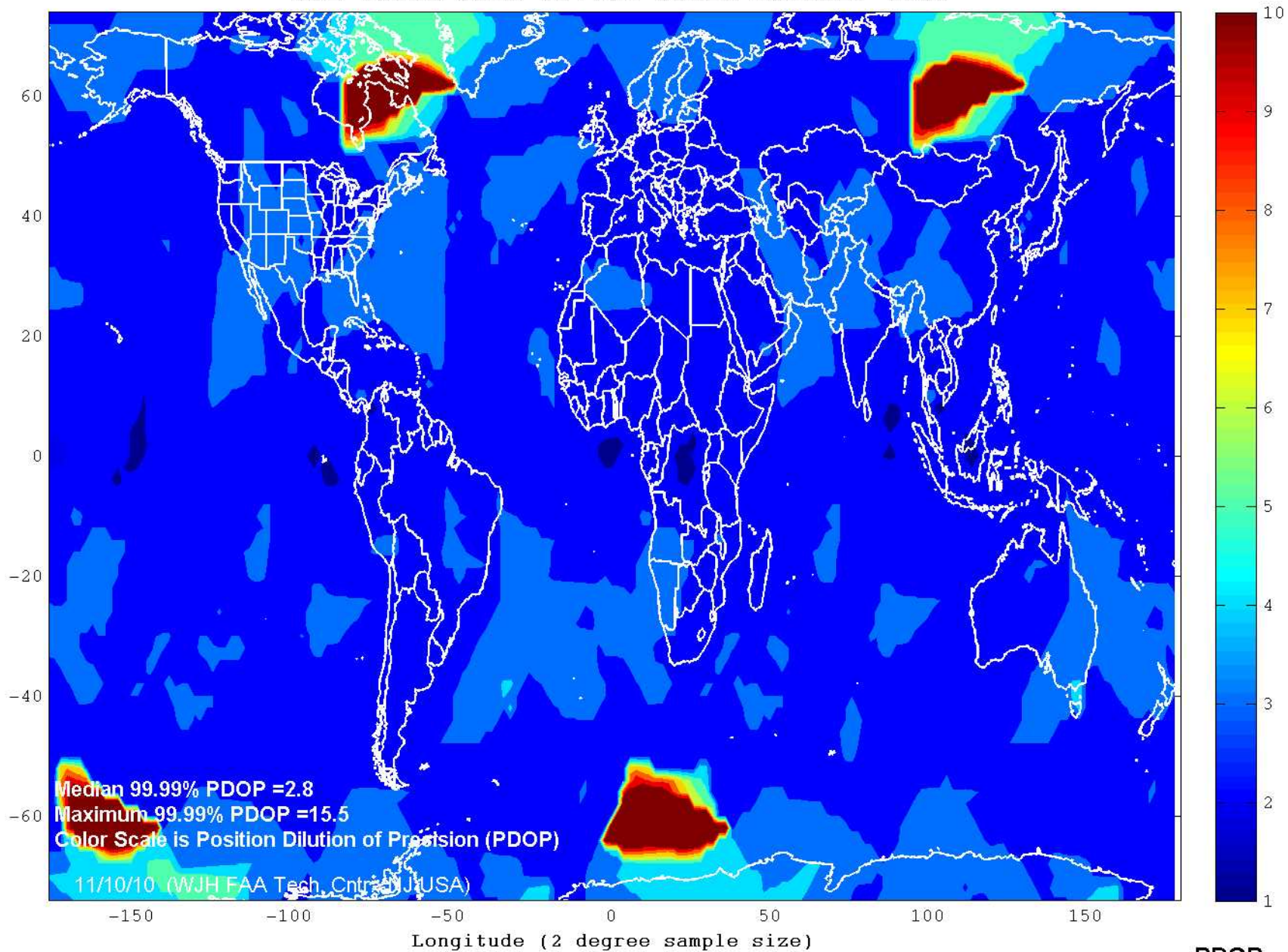
Operational Performance Parameter	CY 2009	Sept 2010	Oct 2010	Long term	Short term
Availability Parameters					
<i>Average Number of satellites usable</i>	30.85	30.97	30.97	↑	→
<i>Average number of satellites usable in primary slots</i>	23.90 (99.59%)	23.97 (99.89%)	23.97 (99.89%)	↑	→
<i>Average availability of 6 satellites in view</i>	99.99%	99.99%	100%	↑	↑
99.99% Horizontal DOP					
<i>Area Median</i>	1.7	1.4	1.4	↑	→
<i>Worst Site</i>	4.8	7.1	6.2	↓	↑
99.99% Vertical DOP					
<i>Area Median</i>	3.1	2.5	2.4	↑	↑
<i>Worst Site</i>	12.0	17.4	14.5	↓	↑
99.99% Position DOP (PDOP)					
<i>Area Median</i>	3.5	2.8	2.8	↑	→
<i>Worst Site</i>	12.8	18.5	15.5	↓	↑
Accuracy Parameters					
RMS Single Frequency User Range Error					
<i>Constellation Median</i>	1.67	1.58	1.65	↑	↓
<i>Worst Satellite</i>	2.26	2.04	2.11	↑	↓
95% Horizontal Error					
<i>Area Median</i>	2.10	2.29	2.14	↓	↑
<i>Worst Site</i>	3.95	4.21	4.34	↓	↓
<i>Availability (% <4.5m (historical 3-sigma))</i>	99.80%	99.75%	99.83%	↑	↑
95% Vertical Error					
<i>Area Median</i>	4.11	3.59	3.91	↑	↓
<i>Worst Site</i>	5.97	5.13	4.45	↑	↑
<i>Availability (% < 9m (historical 3-sigma))</i>	99.98%	99.96%	99.98%	→	↑

Key: ↑ improving ↓ worsening → no significant change

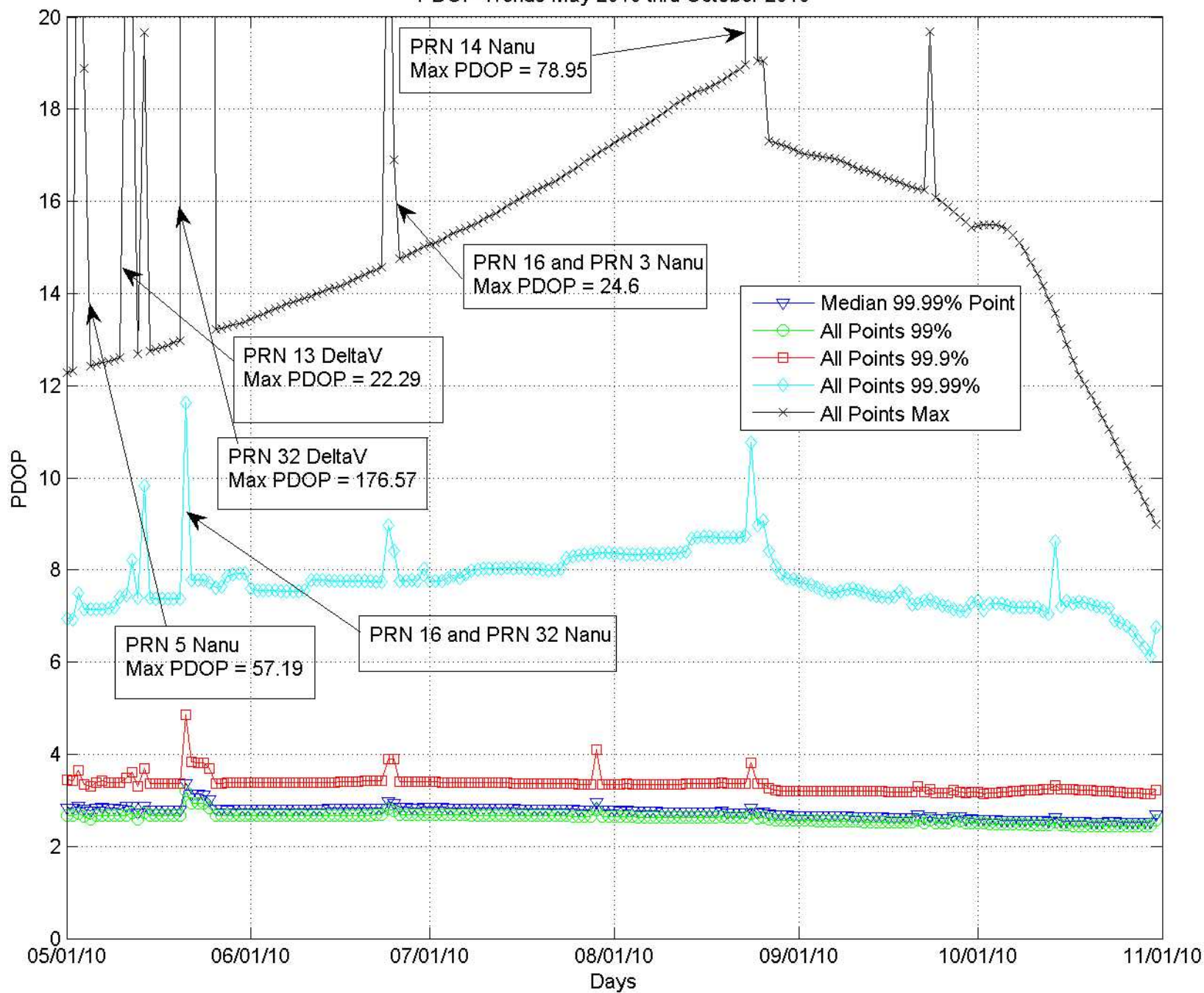
Long Term is current month vs. prior 24 months; Short Term is current month vs. prior month

Compiled from WAAS network as requested by the Defense Science Board

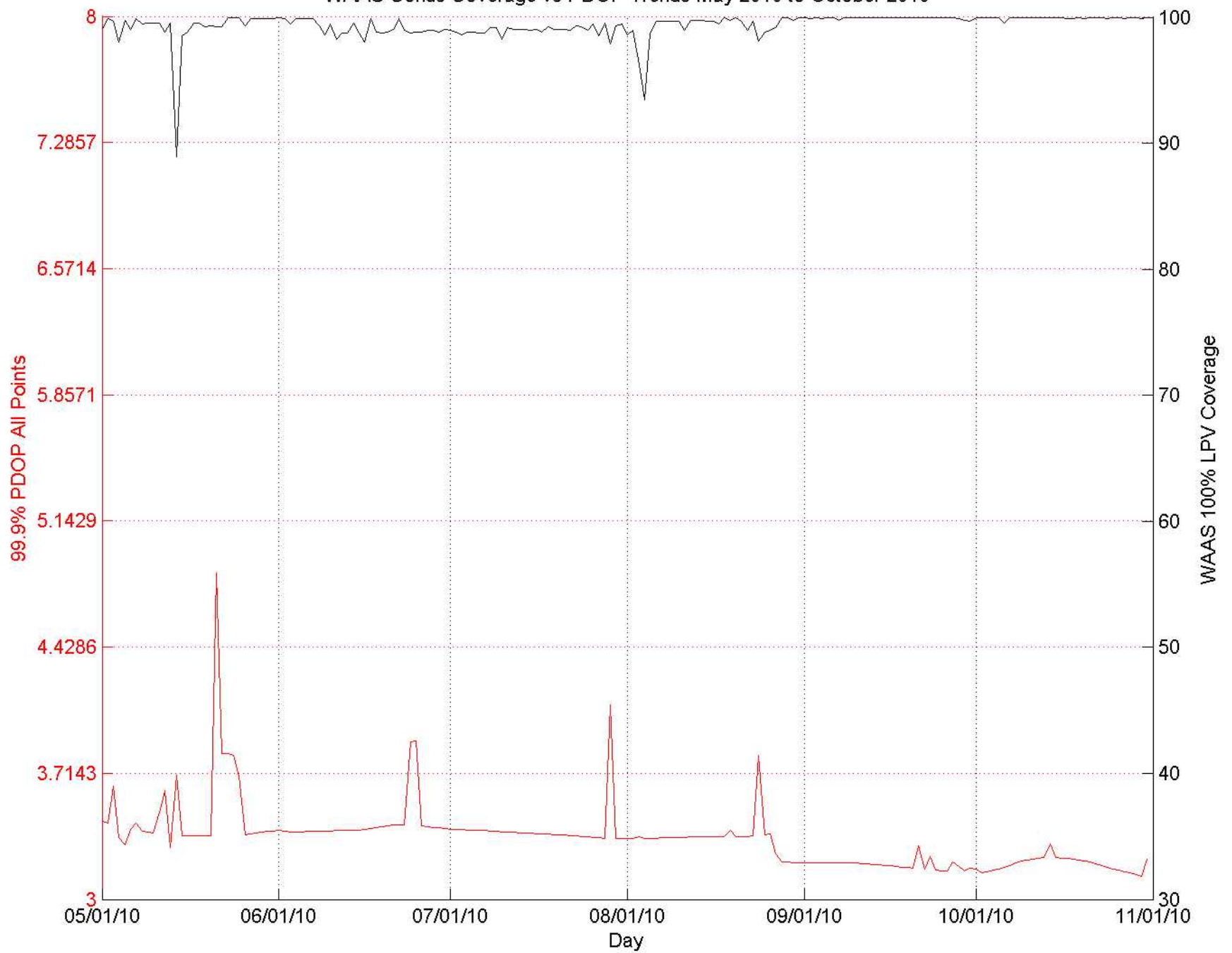
GPS World PDOP 99.99% Index October 2010



PDOP Trends May 2010 thru October 2010



WAAS Conus Coverage vs PDOP Trends May 2010 to October 2010



Six Satellite Availability Trends May 2010 thru October 2010

